



1/3

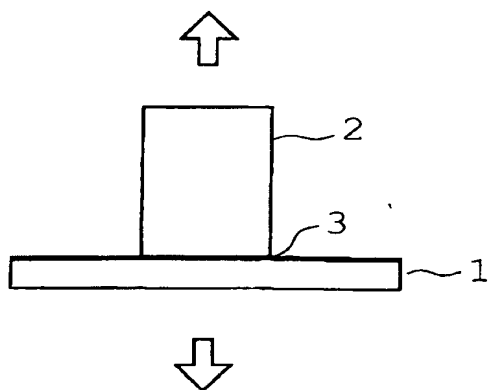


FIG. A

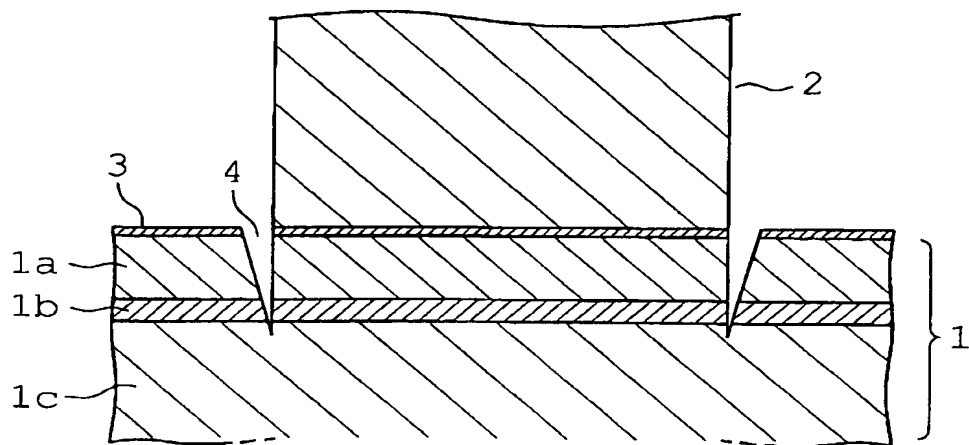


FIG. B



| | | COMPOSITION OF BEARING (VOLUME %) | | | | | | | | | | | | | | |
|------------------------|----|-----------------------------------|---------------|-----|------------------|-----------------|------|---------------------|----|-----|------------------|----|----------------|----|--------------------------------|--|
| | | BEARING ALLOY | BONDING LAYER | | | | | RESIN SURFACE LAYER | | | | | | | | |
| | | | BASE RESIN | | | SOLID LUBRICANT | | BASE RESIN | | | SOLID LUBRICANT | | OTHER ADDITIVE | | | |
| | | | PAI | PI | MoS ₂ | Gr | PTFF | PAI | EP | PBI | MoS ₂ | Gr | PTFE | Cu | Si ₃ N ₄ | |
| EXAMPLE | 7 | Cu | 100 | | | | | | | 60 | 40 | | | | | |
| | 8 | Cu | 100 | | | | | | | 30 | 70 | | | | | |
| | 15 | Cu | | | | | | 60 | | | 40 | | | | | |
| COMPARATIVE EXAMPLE | 16 | Cu | | | | | | 30 | | | 70 | | | | | |
| | 17 | Cu | | | | | | 57 | | | 40 | | | 3 | | |
| | 18 | Cu | | | | | | 57 | | | | 40 | | 3 | | |
| | 19 | Cu | | | | | | 54 | | | 40 | | | 3 | 3 | |
| | 20 | Cu | | | | | | 39 | | | 40 | | 20 | 1 | | |
| cf. | 1 | Cu | | 100 | | | | | | 60 | 40 | | | | | |
| | 2 | Cu | | 100 | | | | | | 30 | 70 | | | | | |

FIG.C



| | | RESULTS OF TEST | | | | | | |
|---------------------|----|-------------------------|----------------------------------|--------------------|---------------------------------------|------------------------|---|--|
| | | COEFFICIENT OF FRICTION | AMOUNT OF WEAR (μm) | SEIZURE LOAD (MPa) | VOLUMETRIC DECREASE (mm^3) | BONDING STRENGTH (MPa) | APPEARANCE OF BROKEN-OUT SECTION | |
| EXAMPLE | 7 | 0.05 | 8 | 27 | 2.74 | 16.4 | RESIN BROKEN OUT | |
| | 8 | 0.03 | 9 | 27 | 4.26 | 10.5 | | |
| COMPARATIVE EXAMPLE | 15 | 0.05 | 17 | 21 | 3.56 | 5.0 | BOUNDARY BETWEEN ALLOY AND RESIN BROKEN OUT | |
| | 16 | 0.03 | 20 | 24 | 6.00 | 2.0 | | |
| | 17 | 0.05 | 6 | 24 | 4.21 | 4.8 | | |
| | 18 | 0.05 | 6 | 24 | 4.76 | 3.2 | | |
| | 19 | 0.04 | 2 | 24 | 5.90 | 4.5 | | |
| | 20 | 0.04 | 7 | 27 | 5.01 | 1.8 | | |
| cf. | 1 | - | - | - | - | 13.9 | RESIN BROKEN OUT | |
| | 2 | - | - | - | - | 8.0 | | |

FIG.D